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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,735

08/29/2005

Thomas Kolb

710.1014

8874

7590 01/15/2009
Davidson Davidson & Kappel
14th Floor
485 Seventh Avenue
New York, NY 10018

EXAMINER

COZART, JERMIE E

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

01/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,735	Applicant(s) KOLB ET AL.	
	Examiner Jermie E. Cozart	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/22/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tassakos (DE 199 30 087 A1; Translation of DE 199 30 087 A1) in view of Sakamoto et al. (4,909,869).

Regarding **claim 9**, Tassakos discloses processing a work piece (4) using a processing system for processing the work piece having a processing tool (2) attached to a hand of a robot (1), the processing system including a sensor system (9) fixedly connected to the processing tool (2), the sensor system (9) including at least one sensor (9), the method comprising the following steps: moving, during a positioning

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phase, the hand with the processing tool (2) into a working position [as shown in Fig. 2], the processing tool (2) in the working position being oriented in a precisely positioned fashion with respect to a reference area (3) of the work piece (i.e. the vehicle body, the roof portion (5) of which is shown in Fig. 2); maintaining, during a subsequent processing phase, the processing tool (2) oriented with respect to the reference area on the work piece; running (page 5, paragraph [0017] and [0018]) through a periodically repeating, iterative closed-loop control process during the positioning phase and the processing phase, the closed-loop control process including: generating (page 6, paragraph [0021]) an actual measured value of the reference area of the work piece by the at least one sensor (9), comparing the actual measured value with a setpoint measured value generated during a set up phase, calculating (page 7, paragraph [0024]) a movement vector of the hand from a difference between the actual measured value and the setpoint measured value using a Jacobi matrix calculated during the set-up phase, and moving (page 7, paragraph [0024]) the processing tool using the movement vector.

Regarding **claim 11**, Tassakos discloses wherein to position the processing tool with respect to different vehicle body types or with respect to different reference areas of a same vehicle body type, the measured values of different individual sensors of the sensor system are used for closed-loop position control.

Regarding **claim 12**, Tassakos discloses wherein the work piece is a vehicle body (see Fig. 2).

Regarding **claim 13**, Tassakos discloses wherein the processing tool mounts a roof module (4) in a roof opening (3, 10) in the vehicle body.

Tassakos, however, does not disclose the work piece moved on the conveyor belt, or the positioning tool mounting a windshield in a front window opening in the vehicle body.

Sakamoto discloses a work piece (10) being moved on a conveyor belt (12, 14), and using a processing tool (80) to mount a window opening (W) in the vehicle body, in order to carry the window glass/opening to a predetermined position close to the window frame portion (16) of the vehicle body (10). *See column 4, lines 61-63; column 9, lines 57-65; and figure 7 for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to move the work piece on a conveyor belt and to use the processing tool of Tassakos to mount a front window opening in the vehicle body, in light of the teachings of Sakamoto, in order to position the window opening into predetermined position with the vehicle body.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tassakos/Sakamoto as applied to claim 9 above, and further in view of XP 002278110 (Planning Network Communications, July 2000).

Tassakos/Sakamoto discloses all of the claimed subject matter except for a TCP/IP interface being used for communication between a control system of the robot and an evaluation unit of the sensor system.

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XP`110 discloses that TCP/IP networks are used to communicate to provide high speed exchange of information between computers, controllers, and related devices over vast distances. *See page 45 for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to provide a TCP/IP interface to allow the control system of the robot and evaluation unit of the sensor system of Tassakos/Sakamoto to communicate with one another, in light of the teachings of XP`110, in order to allow high speed exchange of information between the controller and a related device (i.e. evaluation unit).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie E. Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jermie E Cozart/
Primary Examiner, Art Unit 3726

January 13, 2009